

A NEW SPECIES OF COPTODISCA. (LEPID.)

BY WM. G. DIETZ,
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Coptodisca kalmiella, n. sp.

Size minute. Head, palpi and antennæ silvery gray, the latter long. Forewings golden-brown from the base to about the middle of their length, passing gradually into golden yellow; a silvery, triangular band-like spot at about two-thirds the wing length, on both the costal and posterior margins, the apices of which nearly meet on the disk, and margined proximally and distally with black. Cilia nearly double the width of the wing, traversed by the bases of the black-margined silvery spots, a black costal stria before the apex; a trapezoidal black spot in basal two-thirds of the cilia, at the apex, surmounted by a black line extending to the edge of the cilia; basal two-thirds of dorsal cilia in apical third with two broad, concentric lines separated by a pale line of the ground colour; proximad to this is a brownish tuft, from base to free margin of cilia; rest of cilia, a brownish gray. Hind wings very narrow; cilia about three times their width. Legs and body, silvery gray.

Habitat.—Browns Mills, N. J., mining leaves of *Kalmia angustifolia*. Collectors, H. B. Weiss and C. S. Beckwith, June 22 to June 30. Type and paratypes in collection of H. B. Weiss.

NOTES ON COPTODISCA KALMIELLA DIETZ, A LEAF MINER OF
KALMIA ANGUSTIFOLIA.

BY HARRY B. WEISS AND CHARLES S. BECKWITH,
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This microlepidopteron first attracted our attention at Brown's Mills, N. J., by its work on the leaves of sheep laurel (*Kalmia angustifolia* L.) which were observed to be full of small oval holes. Closer observation revealed mines inhabited by lepidopterous larvæ and upon rearing them, we secured a species of *Coptodisca* which was kindly described by Dr. W. G. Dietz as *kalmiella*.

The mines of this species are irregular and blotch-like, extending from the midrib almost and sometimes entirely to the edge of the narrow leaf. They are visible on both sides of a leaf, more so on the upper where they appear as reddish brown, dry areas partly filled with excrement. The number of mines in a leaf varied from one to twelve. Twenty-nine leaves were found to average five mines to a leaf. In some leaves many of the mines ran together and took up most of the leaf surface. Leaves on all parts of the plants were infested, especially terminal ones.

During the last week of May many mines were found to contain full-grown larvæ, and many were empty. From this it appears as if the larvæ over-wintered in the mines and that our observations started just as the larvæ were leaving. When full grown the larva cuts an oval case (3 mm. long; 1.6 mm. wide) from a part of the mine which is free from excrement, this case consisting of the semi-transparent upper and lower leaf surfaces which are fastened together. This oval case is regular in outline with a clean cut edge. When the oval is completely cut, the case containing the larva either drops to the ground or the larva crawls to the tip of a leaf pulling the case after it, and finally drops